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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,328	01/20/2006	Alois Maier	NY-HUBR-1291-US(10600638)	2248

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EXAMINER

NILAND, PATRICK DENNIS

ART UNIT.	PAPER NUMBER
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1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/565,328	Applicant(s) MAIER ET AL.	
	Examiner Patrick D. Niland	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-50 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 26-50 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/06, 2/06</u> | 6) <input type="checkbox"/> Other: ____ |

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1. Claims 26-50 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the disclosed unsaturated fatty acid derivatives, does not reasonably provide enablement for the full scope of the claimed fatty acid derivatives. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

A. The instant claims recite “fatty acid derivative” and “polyisocyanate derivative” but the specification does not fully enable the full scope of “fatty acid derivative” and “polyisocyanate derivative”. It is unclear how much derivation may be performed also. In re Wands has 8 criteria, MPEP 2164.01(a), as shown below. The template uses only 3 because that's all we needed in a specific fact situation. You can and should use more criteria, if appropriate, to make your point.

(A)The breadth of the claims;

(B)The nature of the invention;

(C)The state of the prior art;

(D)The level of one of ordinary skill;

(E)The level of predictability in the art;

(F)The amount of direction provided by the inventor;

(G)The existence of working examples; and

(H)The quantity of experimentation needed to make or use the invention based on the content of the disclosure. The claimed “fatty acid derivative” and “polyisocyanate derivative” encompass an infinite number of derivations (Wands factor A). The chemical arts are unpredictable to the ordinary

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skilled artisan (Wands factors B, C, D, and E). The ordinary skilled artisan has not even contemplated all of the “derivatives” encompassed by the instant claims nor figured out how to make them (Wands factors A-E). The instant specification gives scant direction as to how to make all of the “derivatives” encompassed by the instant claims and how to choose the ones that will function according to the instantly claimed invention (Wands factors F-G). It would require an undue, e.g. infinite, amount of experimentation to determine how to make all of the “derivatives” encompassed by the instant claims and then to figure out which ones will function according to the instantly claimed invention (Wands factor H). The claims are therefore not commensurate in scope with the enabling specification.

2. Claims 26-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The term “high molecular weight polyurethane” in claim 26 is a relative term which renders the claim indefinite. The term “high molecular weight polyurethane” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is therefore unclear what scope the applicant intends to be “high molecular weight” given the relative nature of “high”.

B. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and

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Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 44 recites the broad recitation of equivalent ratios, and the claim also recites the narrower range denoted by "preferably" which is the narrower statement of the range/limitation.

C. The instant claim 46 recites a molecular weight of a polymeric species without specifying average nor the type of average molecular weight and the instant specification does not describe a polydispersity of exactly one. It is therefore unclear what type of polymer molecular weight is intended.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 26-50 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6462127 Ingrisich et al..

Ingrisich discloses the instantly claimed polyurethane dispersions at the abstract; column 1, lines 4-67; column 2, lines 1-67; column 3, lines 1-67, particularly 44-67 which broadly encompasses the instantly claimed invention; column 4, lines 1-67, particularly 18-67, which encompasses the instantly claimed ingredients and amounts thereof. It is noted that the instant claim recites ">12" regarding component A and the disclosure's preferred amount of the instantly claimed component A is 0.3-12%. However, the instant claims recite "comprise", which encompasses the instant components of the patentee. The instantly claimed amounts appear to be based only on the claimed components, not the additional components encompassed by "comprise". The ingredients of column 5, lines 1-8 are additional to those of the instant claims. Taking the amounts of column 5, lines 1-8 of the patentee from the patentee's composition and using the larger amounts of the instantly claimed component A of the patentee gives amounts within those of the instant claims since removing the amounts of column 5, lines 1-8 lowers the amount of the denominator used to calculate the amounts. Furthermore, the amounts overlap due to experimental error in making such measurements and because the broader disclosure of the patentee encompasses larger than the preferred amounts of the instantly claimed component A. Note also column 5, lines 9-67; column 6, lines 1-67, column 7, lines 1-67; column 8, lines 1-67; column 9, lines 1-67; column 10, lines 1-19, which encompasses the instantly claimed high molecular weight; ; column 11, lines 18-67; column 12, lines 1-67; column 13, lines 1-44 which discloses the instantly claimed substrates; and the remainder of the

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document which encompasses the limitations of the remaining claims, particularly the examples and the claims.

6. Claims 26-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 6462127 Ingrisich et al..

Ingrisich discloses the instantly claimed polyurethane dispersions at the abstract; column 1, lines 4-67; column 2, lines 1-67; column 3, lines 1-67, particularly 44-67 which broadly encompasses the instantly claimed invention; column 4, lines 1-67, particularly 18-67, which encompasses the instantly claimed ingredients and amounts thereof. It is noted that the instant claim recites ">12" regarding component A and the disclosure's preferred amount of the instantly claimed component A is 0.3-12%. However, the instant claims recite "comprise", which encompasses the instant components of the patentee. The instantly claimed amounts appear to be based only on the claimed components, not the additional components encompassed by "comprise". The ingredients of column 5, lines 1-8 are additional to those of the instant claims. Taking the amounts of column 5, lines 1-8 of the patentee from the patentee's composition and using the larger amounts of the instantly claimed component A of the patentee gives amounts within those of the instant claims since removing the amounts of column 5, lines 1-8 lowers the amount of the denominator used to calculate the amounts. Furthermore, the amounts overlap due to experimental error in making such measurements and because the broader disclosure of the patentee encompasses larger than the preferred amounts of the instantly claimed component A. Note also column 5, lines 9-67; column 6, lines 1-67, column 7, lines 1-67; column 8, lines 1-67; column 9, lines 1-67; column 10, lines 1-19, which encompasses the instantly claimed high molecular weight; ; column 11, lines 18-67; column 12, lines 1-67;

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column 13, lines 1-44 which discloses the instantly claimed substrates; and the remainder of the document which encompasses the limitations of the remaining claims, particularly the examples and the claims.

It would have at least been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the ingredients and amounts thereof and the reaction parameters of the instant claims in making the dispersions of the patentee because these are encompassed by the disclosure of the patentee and would have been expected to give the properties of the dispersions of the patentee. It would have at least been obvious to one of ordinary skill in the art at the time of the instantly claimed invention to use the instantly claimed amounts of the instantly claimed component A in the dispersions of the patentee because using one molecule more of the preferred amounts of the patentee that read on the amounts of the instant claims will not give a measurably different result and will give only predictable results to the ordinary skilled artisan.

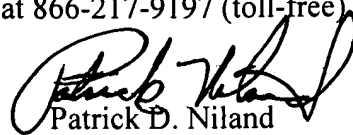
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Patrick D. Niland", is written over the printed name.

Patrick D. Niland
Primary Examiner
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